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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-------------|----------------------|--------------------------|-----------------|
| 10/582,560 | 06/12/2006 | Rainer Aufischer | AUFISCHER ET AL-1 PCT | 1583 |
| 25889 7590 12/11/2009 COLLARD & ROE, P.C. | | | EXAMINER | |
| 1077 NORTHERN BOULEVARD | | PILKINGTON, JAMES | | |
| ROSLYN, NY 11576 | | ART UNIT | PAPER NUMBER | |
| | | | 3656 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 12/11/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

| Application No. | Applicant(s) | |
|------------------|------------------|--|
| 10/582,560 | AUFISCHER ET AL. | |
| Examiner | Art Unit | |
| JAMES PILKINGTON | 3656 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,

- WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
- after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. \$133).
 Any reply received by the Office later than three months after the mailing date of this communication, usen if through field, may repluce any

| S. Patent and T | redemark Office tev: 08-06) Office Action Sumi | mary Part of F | Paper No./Mail Date 20091208 | | | |
|---|--|---|------------------------------|--|--|--|
| 2) Notice Notice Notice | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) metion Disclosure Statement(s) (PTO/G5/08) r No(s)/Mail Date | 4) Interview Summary (PTC Paper No(s)/Mail Date | | | | |
| Attachmen | tt(s) | | | | | |
| * 5 | See the attached detailed Office action for a list of the ce | rtified copies not received. | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| | Certified copies of the priority documents have been received in Application No | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| - | under 35 U.S.C. § 119 Acknowledgment is made of a claim for foreign priority u | inder 35 U.S.C. § 119(a)-(d) | or (f) | | | |
| /— | | Note the attached Office Acti | IOIT OF IOIIII PTO-132. | | | |
| 111 | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 10)🛛 | 10)⊠ The drawing(s) filed on <u>06 April 2009</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | |
| | The specification is objected to by the Examiner. | | | | | |
| Applicati | ion Papers | | | | | |
| اللات | of Claim(s) are subject to restriction and/or election requirement. | | | | | |
| | Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement. | | | | | |
| | Claim(s) <u>1-5</u> is/are rejected. | | | | | |
| | Claim(s) is/are allowed. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| , | Claim(s) <u>1-5</u> is/are pending in the application. | | | | | |
| Disposit | ion of Claims | | | | | |
| | closed in accordance with the practice under Ex parte (| Quayle, 1935 C.D. 11, 453 O | .G. 213. | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| 2a)⊠ | This action is FINAL . 2b) ☐ This action is | non-final. | | | | |
| 1) 又 | Responsive to communication(s) filed on 23 November | 2009. | | | | |
| Status | | | | | | |
| eam | ed patent term adjustment. See 37 CFR 1.704(b). | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norito, US PGPub 2003/0180572.

Norito discloses a bearing for reducing friction with a support shell (2a) and a sliding layer (2b) made of a bearing metal (see paragraph 0020) which is applied to the support shell (2a), wherein the sliding layer (2b) carries a cover layer (4), wherein the cover layer (4) forming the running layer differs optically from the sliding layer (2b, 2b is a metal of aluminum, copper or bronze which differs optically form the cover layer which is made of silver and an amorphous carbon to form a solid lubricant) and wherein the cover layer comprises of a sliding lacquer. Norito also discloses sizing the cover layer (4) between 10 and 20 µm with a wear amount of approximately 6 µm is expected. Sizing a layer to be more than the expected wear will cause the cover layer to wear away no later that the time at which the sliding layer experiences breakage.

Norito does not disclose that the average service life of the slide layer is used to calculate the initial thickness of the cover layer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to calculate the initial thickness of the cover laver based on the

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average desired service life and particular load condition, since designing a component to last a particular service life period based on particular parameters, such as time and loading, is an engineering design technique. Such a determination is only a matter of discovering an optimum value for a result effective variable and involves only routine skill in the art.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norito '572 in view of Braus, USP 4,847,135.

Norito discloses all of the subject matter as applied above.

Norito does not disclose that the cover layer is covered by a sliding lacquer on the basis of graphite or molybdenum sulfide.

Braus teaches that the use of graphite or molybdenum sulfide as a coating surface (C3/L27-48) for the purpose of improving the friction and sliding properties of the bearing (C3/L27-48).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Norito and provide a layer on the cover layer which is a sliding lacquer on the basis of graphite or molybdenum sulfide, as taught by Braus, for the purpose of improving the friction and sliding properties of the bearing.

Response to Arguments

Applicant's arguments filed November 23, 2009 have been fully considered but they are not persuasive.

Applicant argues that Nortio does not disclose the method of calculating the initial thickness of the cover layer so that the cover layer will wear away at a time not later

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than the time at which the slide layer experiences metal breaking and that the Examiner's position relies on hindsight reasoning.

First, Norito discloses all of the recited structure of the claim including the support shell, sliding layer and cover layer. Norito further discloses that the thickness of the cover layer is selected based on approximated wear amounts. Second, the recitation "wherein the average service life of the slide layer is used to calculate the initial thickness of the cover layer so that the cover layer will wear away at a time not later than the time at which the slide layer experiences metal breakage" does not address any particular structure. The recitation merely recites a design step that does not limit the claim to any particular structure or thickness of the layers. Although Norito does not disclose how the thickness of the layers are determined the required structure of the claim is disclosed and may indeed have a cover layer which has an initial thickness that will wear away at a time not later than the time at which the slide layer experiences metal breakage. Furthermore, designing a component to wear out at a point that is not prior to breaking is indeed obvious to one skilled in the art since such an arrangement would provide optimum run time and service life for the lost cost factor.

The Applicant argues that Norito does not disclose a feature that permits recognition/indication of the wear and tear on the running layer.

First, the independent claim does not address any indication or recognition feature of the device. Second, Norito discloses two different materials which are visually different, the use of two different materials permits recognition of when the

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changing of the bearing is necessary (i.e. the cover layer is worn the under layer is visible).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES PILKINGTON whose telephone number is (571)272-5052. The examiner can normally be reached on Monday - Friday 7-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES PILKINGTON/ Examiner, Art Unit 3656 12/8/09 /Thomas R. Hannon/ Primary Examiner, Art Unit 3656